

ABSTRACT OF THE DISCLOSURE

The invention relates to a conditioning circuit that measures operating points of a power supply to deduce therefrom the current-voltage characteristic thereof and to determine directly the voltage corresponding to its maximum power point, without using any kind of tracking algorithm that causes the operating point of the power unit to oscillate about the maximum power point. The maximum power point voltage  $V_{MPP}$  is supplied to a controller which regulates a power cell by slaving it to the input voltage until the output voltage of the supply is equal to the maximum power point voltage  $V_{MPP}$ . The invention also relates to a solar generator and an associated conditioning method. One particular application is to high-power satellites.